

EXISTING TRANSPORTATION CONDITIONS



TRANSPORTATION STUDY

Transportation Study Scope

- Transit, Bicycle, Pedestrian analysis
 - Rail Spur
 - Madison Street Bikeway
 - Royal Street Neighborhood Bikeway
- Traffic Analysis
 - Existing Conditions
 - 2040 Baseline
 - 2040 Build
 - Madison / Montgomery Conversion analysis
 - Abingdon?
 - Turns on Washington
 - 2040 Mitigation
- Parking Analysis
 - Use of completed Parking Study
- Final Report

EXISTING TRANSPORTATION

- Pedestrian
- Bicycle
- Transit
- Parking
- Roadways / Traffic Operations
- Overall Transportation Initiatives

Pedestrian System

- Well connected sidewalk system
- Street grid facilitates pedestrian movement
- One missing sidewalk
- Substantial demand for pedestrian access
 - Braddock Metro Station
 - 4% of people walk to work
 - 26% of Households make less than \$50,000 per year



Trails

- Mt. Vernon Trail
- Norfolk Southern Trail
- Future Trail along E. Abingdon
- Need to improve Mt Vernon trail at Canal Center Plaza (signage, crossing)



Bicycle Facilities

- Mt. Vernon Trail
- Norfolk Southern Trail
- Some facilities on Union Street
- General lack of on-street facilities



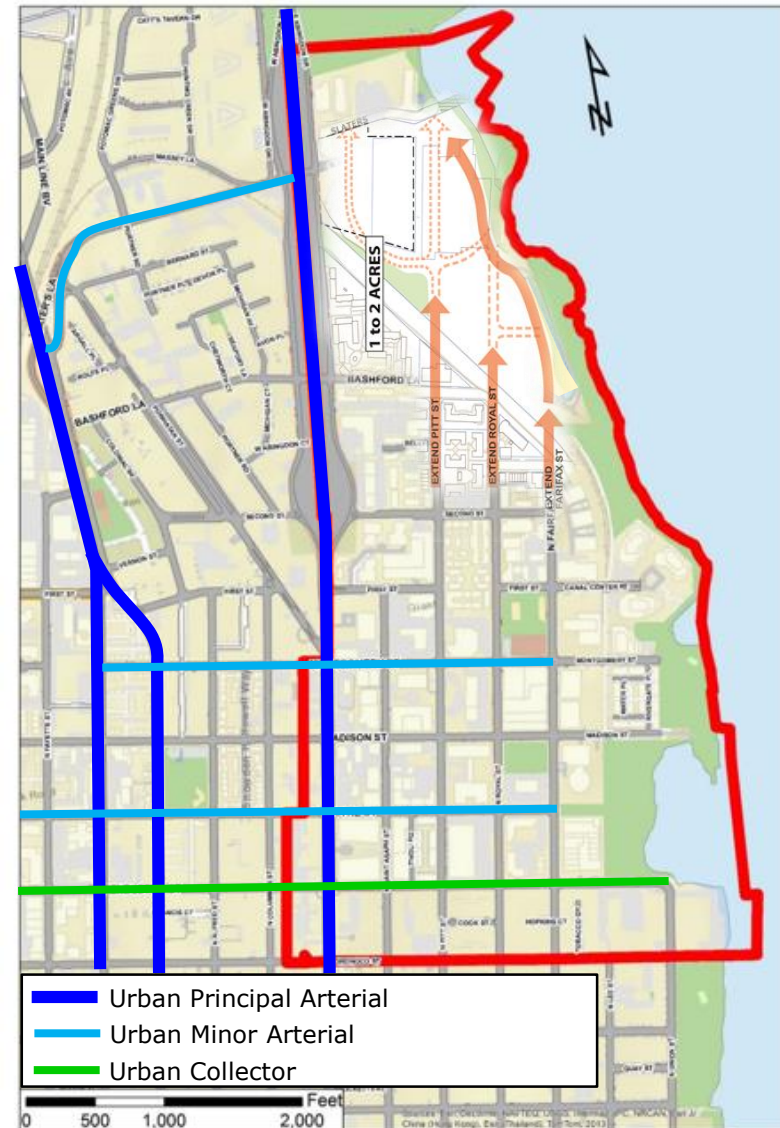
Transit

- 6 DASH Routes
- 3 Metrobus Routes
- Metroway
- Consider extending routes into Power Plant site



Roadways

- Good street grid and connectivity within most of Old Town North
- Future grid should be extended into Power Plant site as it develops



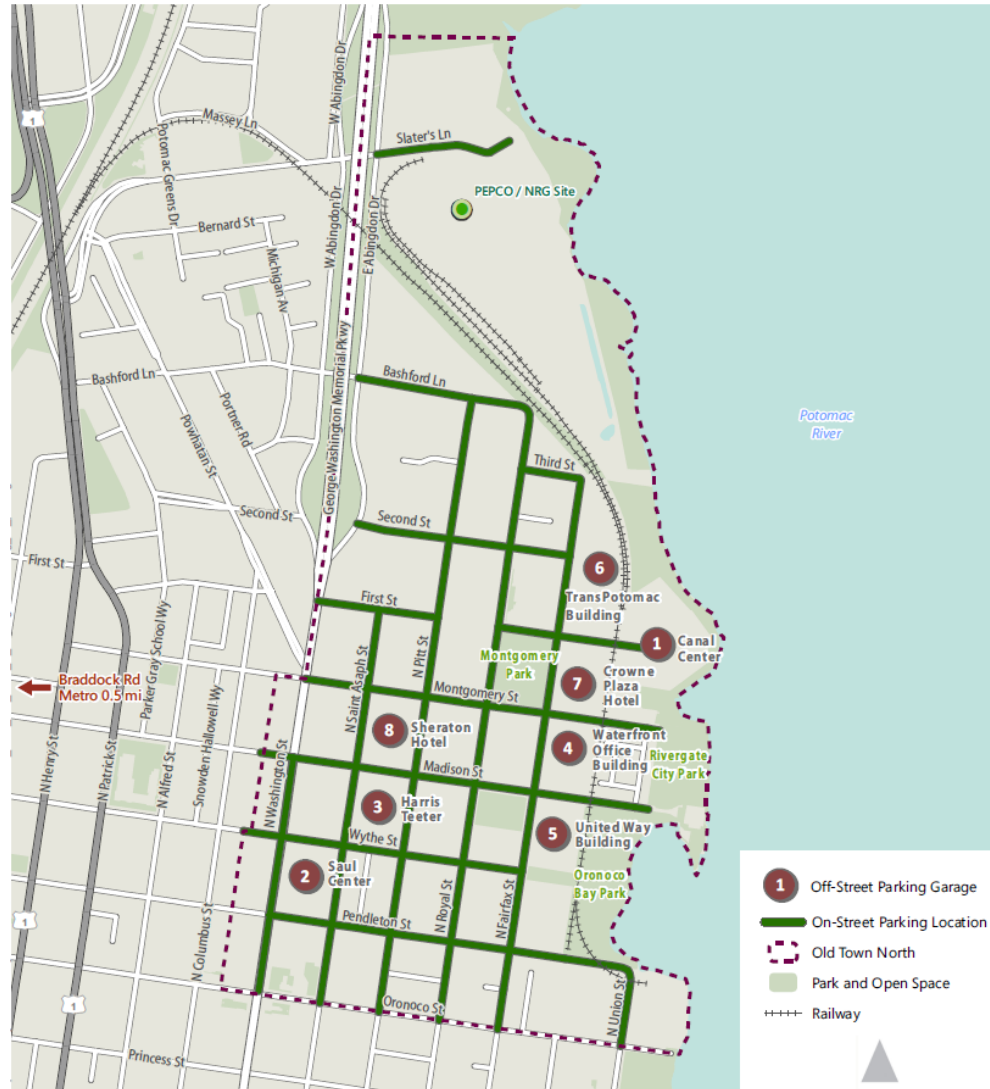
Traffic Operations

- 27 intersections
- Additional intersections to be analyzed under Baseline / Build scenarios
- Microsimulation for Washington Street
- Analyzed Weekday AM and PM peak hours
- Measure delays, queues, level of service



Parking

- Peak onstreet parking occurred weekday at 6PM (~70% overall occupancy)
- Peak off-street parking occurred weekday at 6PM (~70% overall occupancy)
- Off-street parking very underutilized
- Parking Study finalized and online

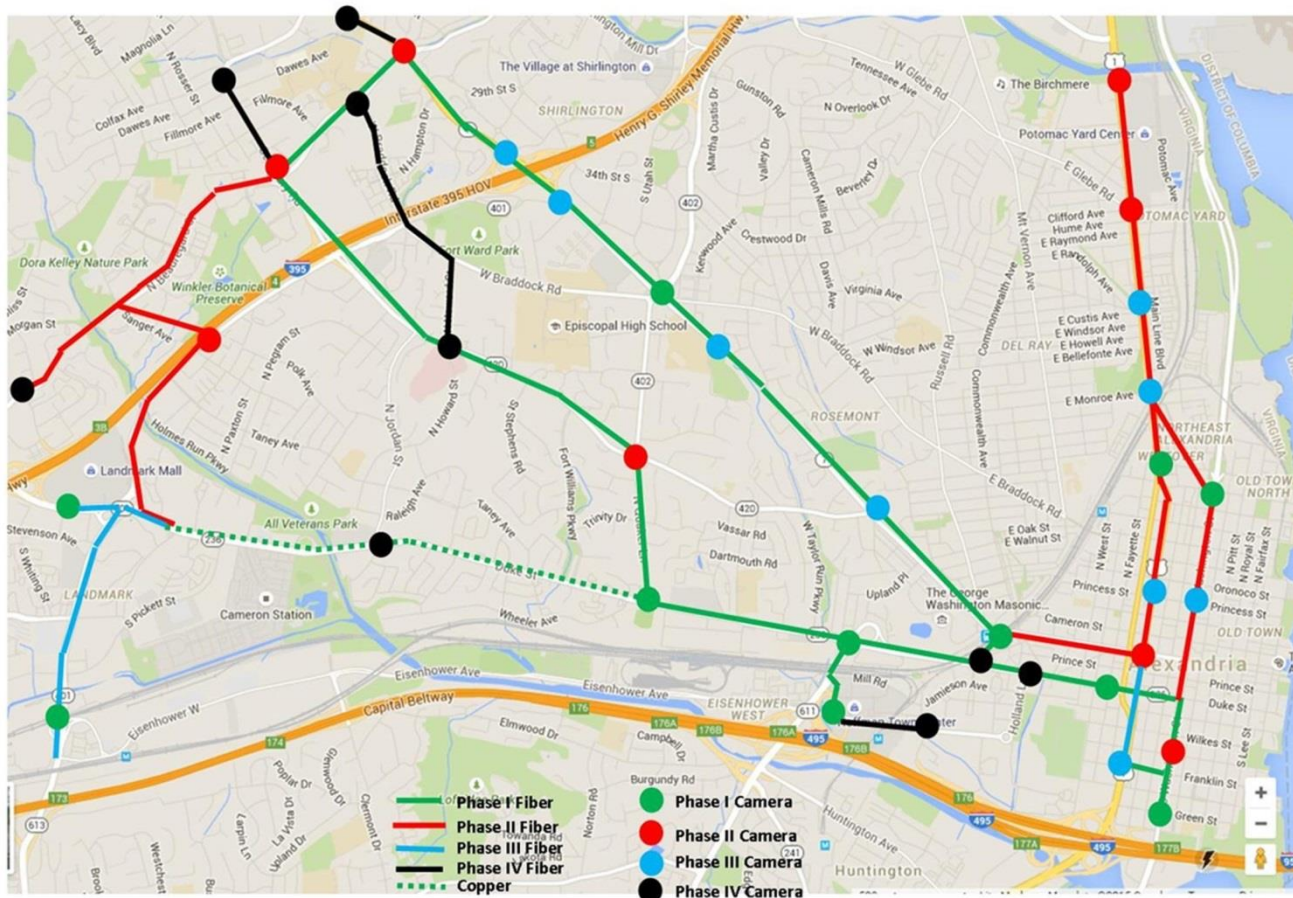


Transportation Initiatives

- **Parking Technologies**
 - Sensors in garages and on-street
 - Real time parking availability
 - Interactive mobile / web applications for parking availability
- **Traffic Control Upgrades**
 - Broad band fiber optic
 - Traffic Management Center upgrade
 - Transit signal priority
 - Signal optimization
 - Adaptive traffic signal control



ITS integration project

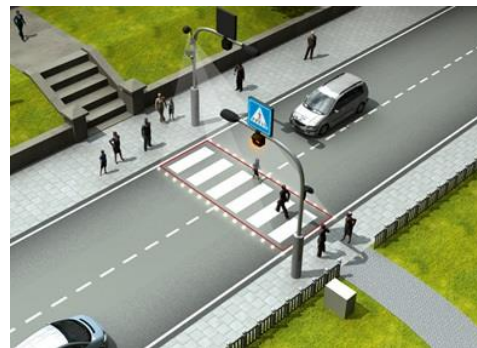


Adaptive Traffic Signal Control System

Data Driven traffic management

Adjust signal timing to meet

- Pedestrian, bike, Vehicle demand
- Traffic conditions like accident, construction



Sense conditions

- Pedestrian, bike sensors
- Vehicle sensors
- Traffic conditions like accident, construction



**Identify prioritization needs
Refine and optimize signal timing plans**

Funded Transportation Initiatives

- Transportation Master Plan (2008)
 - Implementing Transit recommendations – 3 transitways
 - Updated Pedestrian and Bicycle chapters in 2016
 - Streets / Intelligent Transportation in FY 2018
- Other Ongoing Initiatives
 - GO Alex (Transportation Demand Management)
 - Capital Bikeshare
 - Complete Streets Program
 - Parking Initiatives

Next Steps

- Continue working on transportation study through the winter
 - Existing Traffic Operations
 - 2040 Baseline Analysis
 - 2040 Build Analysis
 - 2040 Build with Mitigation
 - Pedestrian, bicycle, transit, parking recommendations